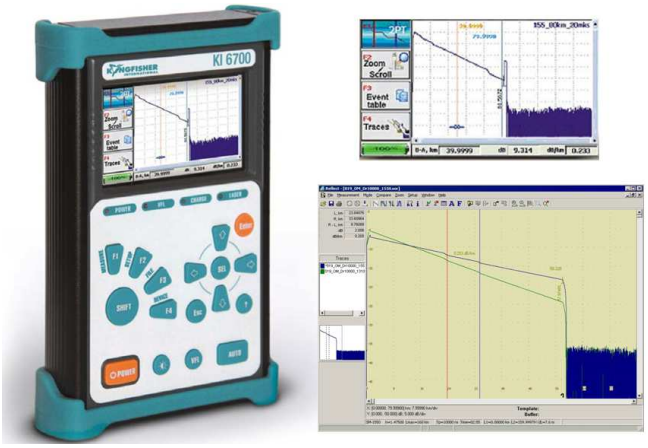
# KI 6700 SERIES

## HANDHELD OPTICAL TIME DOMAIN REFLECTOMETER

### OPTICAL COMMUNICATIONS TEST APPLICATION

- Length measurement
- Tier 2 testing
- Splice loss verification
- Optical network verification
- Active Network / FTTH PON testing option
- SMF and MMF application




Revision 4

The reliable, compact and high performance KI 6700 series handheld OTDR is for characterizing the loss and length of fibre, certifying and fault finding fibre optic cable systems.

In addition to the basic OTDR functions, KI 6700 series have a variety of enhanced capabilities such as automatic multiple wavelength testing, file save to a USB flash drive, and advanced cursor placement.

Handheld, fully featured and ease of use summarise the advantage of KI 6700 series OTDR.

## FEATURES

- Functions as OTDR and Laser source
- Multiple wavelength testing
- SMF Dynamic range: up to 43 dB
- MMF Dynamic range: up to 30 dB
- Low SMF OTDR attenuation/event dead zone
- Belcore/Telcordia GR-196 SOR type 1, 1.1 & 2 format compliance.
- Large and bright high contrast 4.3" TFT screen
- USB-B port for external devices connection
- USB-A port for flash memory stick
- Small size and weight (1.3 kg/2.9 lb with the battery)
- Up to 7 hours operation with internal Ni-MH battery
- Rugged metal case with protective silicone overlays
- Advanced and automatic measurement modes cater for the experienced and beginner user
- 780 to 50000 traces for the internal memory
- 2 year warranty

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## SPECIFICATIONS

| Parameters | P/N suffix | | | |
|---|---|---|---|---|
| **SMF OTDR** | **None** | **A** | **B** | **C** |
| λ tolerance | λ ± 20 nm | | | |
| Dynamic range (dB) @SNR = 1 & wavelength as applicable | 1310 nm: 34<br>1490 nm: 30<br>1550 nm: 32<br>1625 nm: 31 | 1310 nm: 30<br>1490 nm: 26<br>1550 nm: 28<br>1625 nm: 27 | 1310 nm: 38<br>1490 nm: 34<br>1550 nm: 36<br>1625 nm: 35 | 1310 nm: 41<br>1490 nm: 38<br>1550 nm: 43<br>1625 nm: 39 |
| Attenuation dead zone[1] | 4.5 m | 10.0 m | 7.0 m | 13.0 m |
| Event dead zone[1] | 1.2 m | 2.4 m | 2.5 m | 3.0 m |
| Pulse width | 6, 12, 25, 100, 300, 1000, 3000, 10000, 20000 ns | | | |
| Distance range | 2, 5, 10, 20, 40, 80, 120, 160, 240 km | | | |
| **SMF OTDR Laser Source** | | | | |
| Output power | > -10 dBm | | | |
| Power level stability | < 0.01 dB (15 min) | | | |
| Operating mode | CW & 2 kHz | | | |

| **MMF OTDR** | | |
|---|---|---|
| | Fiber Core diameter: 50 µm | Fiber Core diameter: 62.5 µm |
| λ tolerance | λ ± 20 nm | |
| Dynamic range (dB) @SNR = 1 & wavelength as applicable | 850 nm: 28 dB<br>1300 nm: 30 dB | 850 nm: 29 dB<br>1300 nm: 31 dB |
| Attenuation dead zone[1] | 4.5 m | |
| Event dead zone[1] | 1.2 m | |
| Pulse width | 6, 12, 25, 100, 300, 1000 ns | |
| Distance range | 2, 5, 10, 20, 40, 80 km | |

Note 1: at minimum pulse width and reflectance of -40 dB.

## OTDR COMMON SPECIFICATIONS

| Parameters | Value |
|---|---|
| Attenuation resolution | 0.001 dB |
| Attenuation measurement linearity | 0.04 dB/dB |
| Distance measurement accuracy | ± (0.5 + resolution + $3 \times 10^{-5}$ × L) m at (20 ± 5) °C<br>± (0.5 + resolution + $5 \times 10^{-5}$ × L) m at operating temperature range |
| Sampling resolution | 0.16 … 7.6 m |
| Sampling points | up to 64,000 |

## GENERAL SPECIFICATIONS

| Parameters | Value |
|---|---|
| Display | 4.3” TFT 16bit colour |
| Memory | 1) 128 MB internal memory, stores 780 traces for long distance and 50,000 traces for short distance.<br>2) USB flash memory stick |
| Connection with PC | USB, type B |
| Power supply | Internal NiMh battery (5 - 7 hr) or 12V DC |
| Weight | 1.3 kg / 2.9 lb, with internal batteries |
| Dimensions | 214 × 137 × 35 mm / 8.4 x 5.4 x 1.4” |
| Operating temperature | -15 to 50°C / 14 to 122 °F |
| Storage temperature | -25 to 55°C / -13 to 131 °F |

Technical data is subject to change without notice as part of our program of continuous improvements.

Class 1 Laser product, complies IEC60825-1 and 21CFR1040.10

## ORDERING INFORMATION

| Description | P/N | P/N suffix options |
|---|---|---|
| Instrument, OTDR SMF 1310/1550 nm, SC | KI 6701 | None, A, B, C |
| Instrument, OTDR SMF 1310/1550 nm & 1625 nm (filtered), SC | KI 6702 | None, A, B, C |
| Instrument, OTDR 50 µm MMF 850/1300 nm & SMF 1310/1550 nm, SC | KI 6703 | None |

Please enquire alternative fixed connectors: APC, LC, FC, E2000, ST etc.
Please enquire for other wavelengths or other specifications.

## STANDARD ACCESSORIES

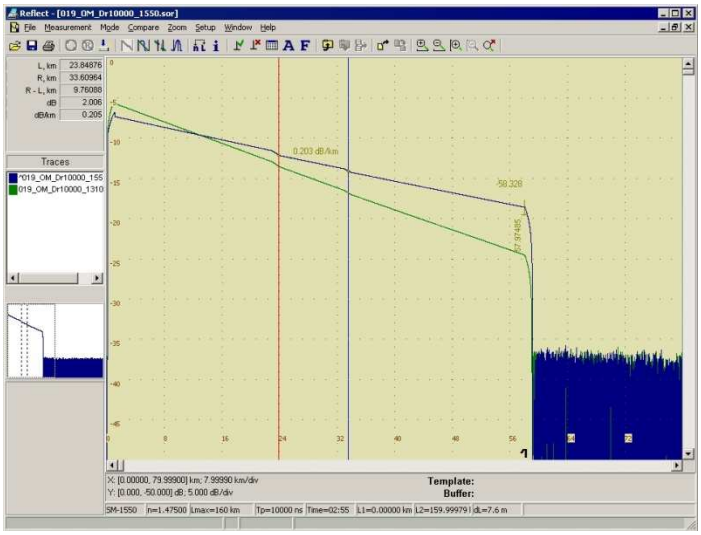
| Description | Quantity |
|---|---|
| Soft carry bag | 1 |
| Instruction manual | 1 |
| Cable, USB | 1 |
| CD with OTDR processing software | 1 |
| Universal power supply with global plug set | 1 |

## OTDR PC SOFTWARE (REFLECT SOFTWARE)

The PC Reflect Software is fully featured and designed for operating KI 6700 OTDR on a PC. It can be used to view and analysis trace files which were measured by OTDRs, to remote control the OTDR, and to save files in BELLCORE formats.

The procedure of connection KI 6700 with a PC is described in the user manual “KI 6700 HAND HELD OTDR” supplied together with the device.

Reflect Software works on Windows 7/Vista/XP operating system.

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